

**IN THE SPECIFICATION:**

*As used herein, all page and line number references to the Specification of the present application correspond to page and line numbers found shown in the Corrected Version of WO 00/65983 A1.*

**At Page 6, replace paragraph starting at Line 12 with "Referring now to Figures 1-3 ..." and ending on Line 28 with the following:**

"Referring now to Figures 1-3, reference numeral 100 illustrates one illustrative embodiment of the audio screening device of the present invention. The screening device 100 includes an enclosure 102, which in the preferred embodiment, and for purposes of illustration and not for limitation, measures 7 ¼" long by 3 ¾" wide by 1 ½" deep. It is important to note that the device 100 can be carried by the user without compromise, and truly represents a portable hand-held device having full functionality as described below. The device 100 includes a keyboard 5, ~~[[a]]~~ an LCD display 4, an LED pass/refer indicator 7, and an LED AC charging indicator 17. Again, by way of illustration and not by limitation, it should be noted that the screen 4 measures, in the preferred embodiment, ~~approximately,~~ approximately 2" by 3 3/8". The measurement is not necessarily important, except to show that the LCD display is fully functional for a user, and the unit can operate independently of any other computer system. In the embodiment illustrated, the enclosure 102 also houses an infrared port 18, and a compatible RS-232 port 18a, a probe connection ~~[[9]]~~ 90 for an ear probe 150, and an interface 103 for a plurality of electrodes 104. The electrodes 104 are shown attached to a conventional carrier 151."

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At Page 7, replace paragraph starting at Line 5 with "Referring now to Figure ..." and ending on Line 11 with the following:

"Referring now to Figure [[2]] 4, a block diagram view of the device 100 is shown and described. The device 100 contains OAE, ABR and OAE simulator capabilities in a single, hand-held package. Preferably, the system shown in Figure [[2]] 4 is manufactured on a single printed circuit board, with mixed signal design for both analog and digital operation. The device preferably is low powered, and generally operates at 3.3 volts, except for the LCD 4 and some low power portions of the analog circuitry employed with the device 100."

At Page 9, replace paragraph starting at Line 5 with "The ABR interface ..." and ending on Line 23 with the following:

"The ARB interface [[80]] 10 consists of a plurality of analog signal processing chips, not shown individually, which filter and amplify the signals connected from the scalp of a subject via electrode wires 104. In this mode of operation, the ear is presented with a repeated auditory stimulus, which causes firing of the eighth nerve, and the associated nerve pass into the brainstem. As those firings occur, electrical potentials are generated all the way to the scalp, and there they are detected by the electrodes 104. An additional function of the interface [[9]] 10 is to provide automated impedance check of the placement of electrodes. Once the electrodes are in place, a small current is injected through the electrodes into the scalp of the subject, and the impedance between electrodes is measured. Impedance can be varied by placement of the electrodes. Once the impedance is within a predetermined range for operation, ABR signal connection can begin. It is important to note that impedance checking can

be accomplished without unplugging the electrodes. That is to say checking is automatic. As later described in greater detail, the measured ABR response is based on the detection of a peak in the waveform in a point approximately up to 15 milliseconds after a sound click, depending upon gestational age or patient age. The actual latency of this peak is then compared to the latency of this peak in normal hearing neonates or adults."

**At Page 11, replace paragraph starting at Line 22 with "The important difference ..." and ending on Line 29 with the following:**

"The important difference between the method of the present invention and linear averaging is that the overlapping number M (sum operation) equals  $((\text{frame number divided by (frame size minus 1)}) \times (\text{frame size divided by (frame data cycle length plus 1)}))$  which is larger than the received data frame number  $[[in]]$  by a factor by which the previous frame is slid. Therefore, the expected performance of this method is better than standard linear averaging. In this method, the frame size divided by frame data cycle length must be an integer. The method is shown diagrammatically in Figure 5 and Figure 6."

**At Page 11, replace paragraph starting at Line 30 with "The processor 1 ..." and ending at Page 12, Line 15 with the following:**

"The processor 1 algorithm is implemented and explained  $[[in]]$  with reference to Figure  $[[4]]$  7 and Figure 8. As there shown, the processor 1 sends an output through the digital analog converter portion of the codecs 8 through the OAE interface 9 to the ear probe utilized in conjunction with the device 100. The ear probe includes a microphone which returns signals through the interface 9 and the codecs 8 to a new

frame buffer 111 in the processor 1. The size of the new frame buffer 111 is calculated to be an integer number of samples of the two primary tones at frequencies  $f_1$  and  $f_2$ , and also, an integer number of samples of the otoacoustic tone produced by the ear at  $f_{dp}$ . This is a critical step to assure quality of subsequent signal processing, by avoiding windowing techniques, which can introduce substantial artifacts. Tables of numbers for each standard frequency employed in the device [[1]] 100 and for other frequencies in use or intended for use in the device [[1]] 100 are available, and are programmed into the algorithm once the user selects the test frequencies. Should a combination of frequencies be required for which no common integer number can be found to fit in a practical size frame, the frame size is adjusted to  $f_{dp}$  and the frame is windowed prior to Fourier Transformation, but this method is used only in extreme cases since in normal operation, the required frequencies are available."

**At Page 15, replace paragraph starting at Line 13 with "Operation of the device ..." and ending on Line 23 with the following:**

"Operation of the device for ABR testing is shown in Figure [[3]] 5 and Figure 6. In ABR testing, the magnitude of the fifth peak is the one that is of primary interest, and the device 100 determines the magnitude of the fifth peak by counting zero crossings, after substantial filtering and digital pre-processing. As shown in Figure [[3]] 5 and Figure 6, the system proceeds to count zero crossings and stores an index of an array element upon determination of a zero crossing. If additional zero crossings are required, the procedure is repeated until the fifth peak is determined. Upon detection, the single waveform is isolated, and the waveform peak is correlated to find the maximum correlation sinusoid. Thereafter, the device [[1]] 100 determines the time of

occurrence of the fifth peak and that value is ~~check~~ checked against empirical data to obtain proper correlation."